

FIG.1 (a)

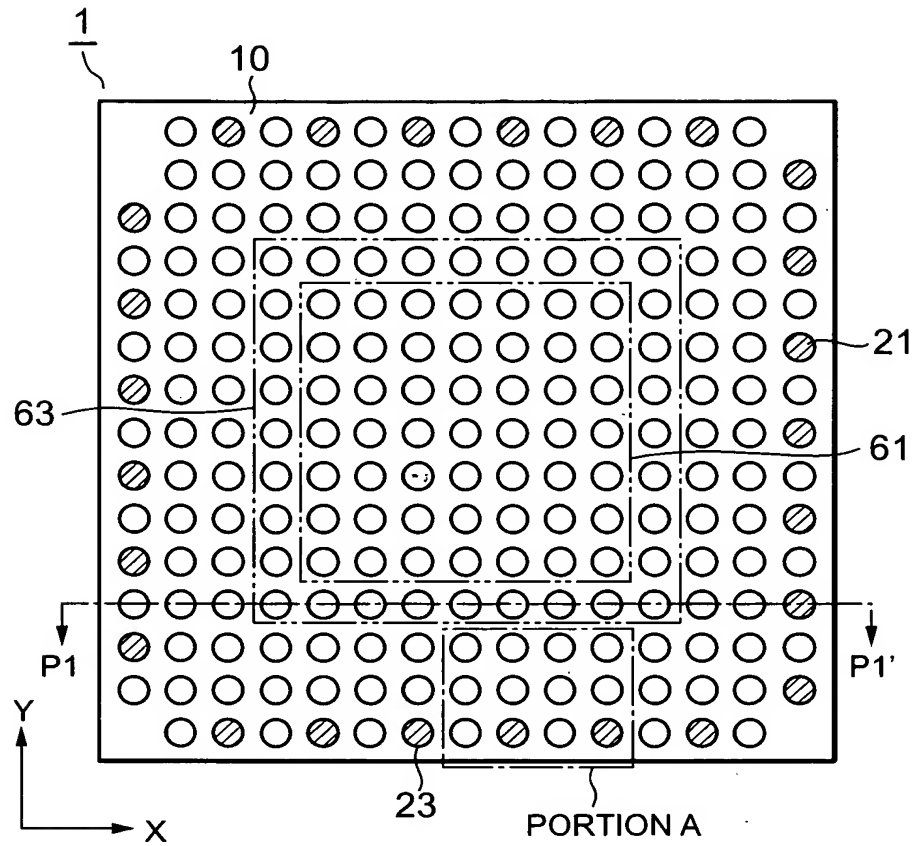
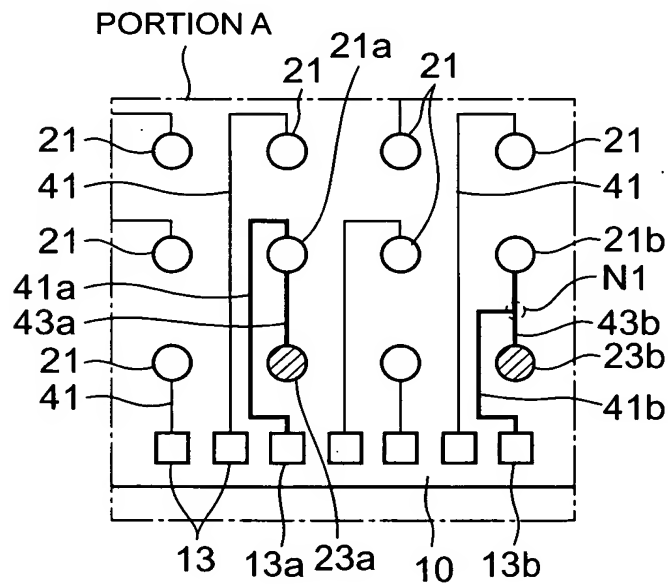
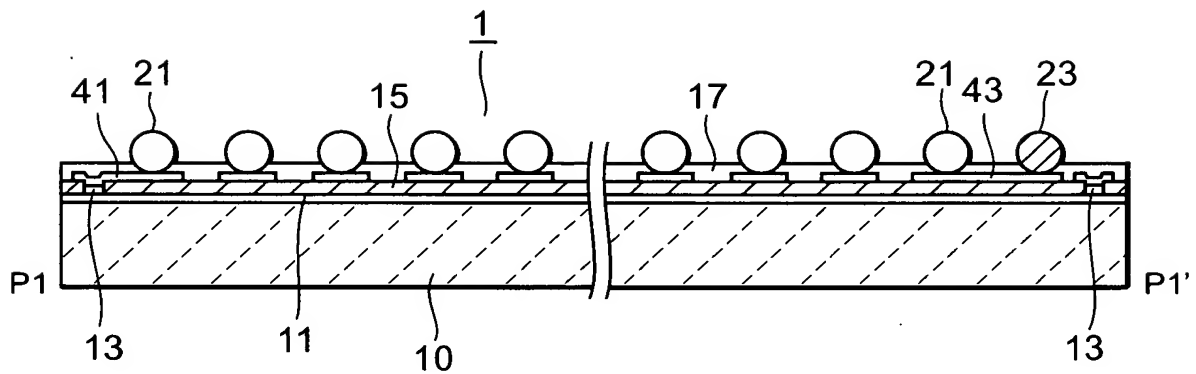


FIG.1 (b)



- | | |
|---------|--------------------|
| 1 LSI | 41 EB REWIRING |
| 10 CHIP | 43 DB REWIRING |
| 13 PD | 61 FIRST BOUNDARY |
| 21 EBP | 63 SECOND BOUNDARY |
| 23 DBP | |

FIG.2



11 FIRST INSULATING FILM

15 LAYER INSULATING FILM FOR REWIRING

17 SECOND INSULATING FILM

FIG.3 (a)

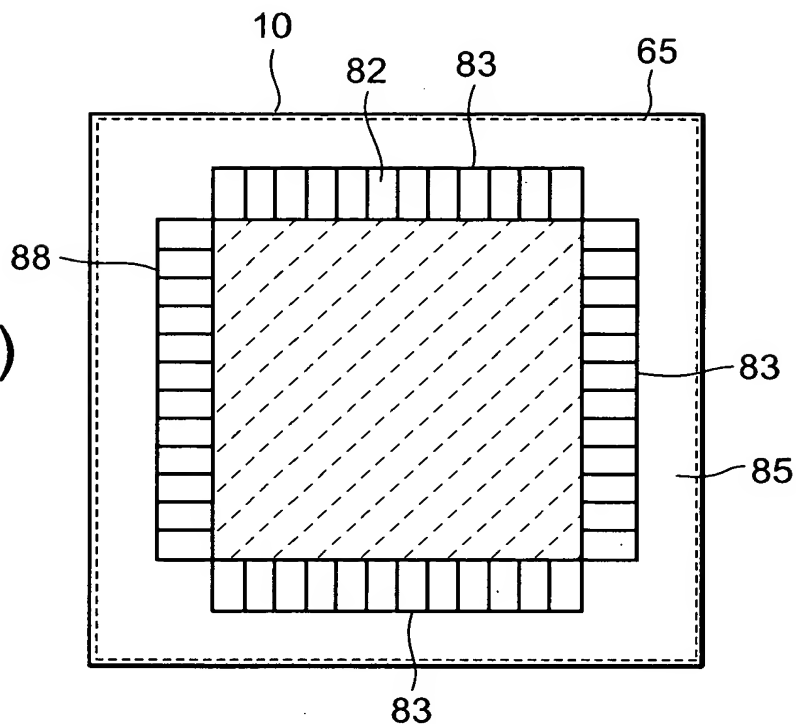
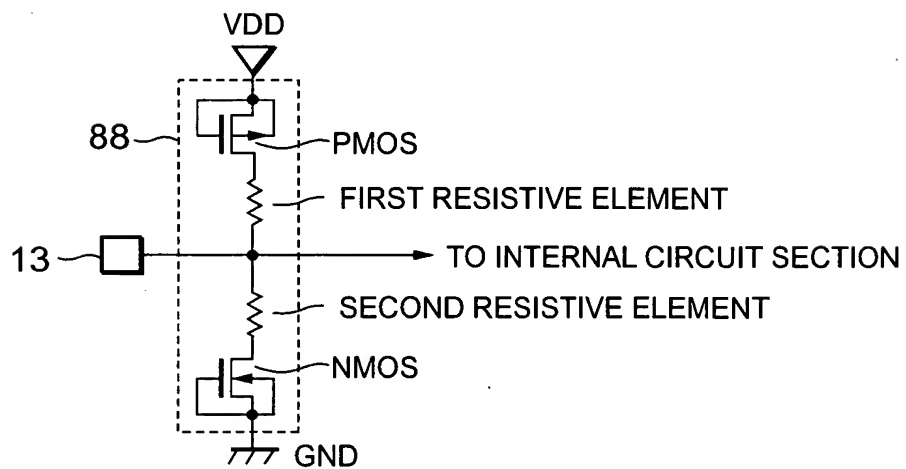


FIG.3 (b)



80 INTERNAL CIRCUIT SECTION
82 I / O BUFFER CELL
83 I / O CIRCUIT SECTION
85 PERIPHERAL REGION
88 ELECTROSTATIC PROTECTION CIRCUIT

FIG.4 (a)

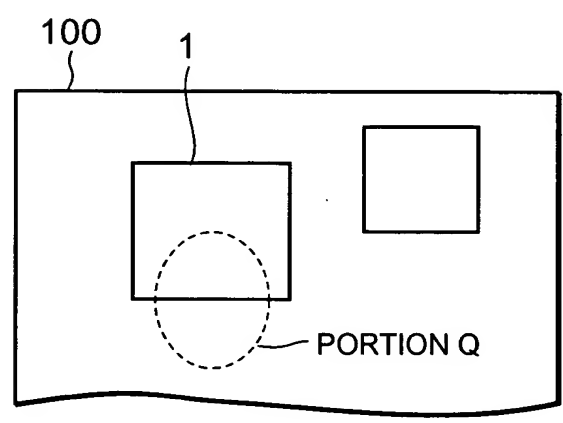
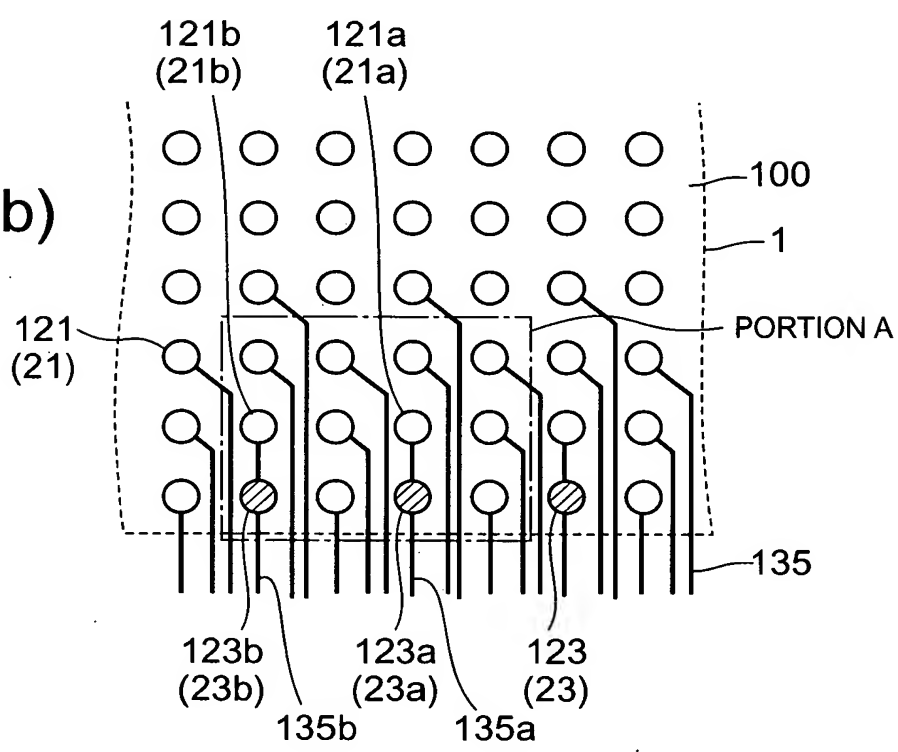


FIG.4 (b)



100 MOUNTING SUBSTRATE
121,123 SUBSTRATE ELECTRODE
135 LEAD-OUT WIRING

FIG.5 (a)

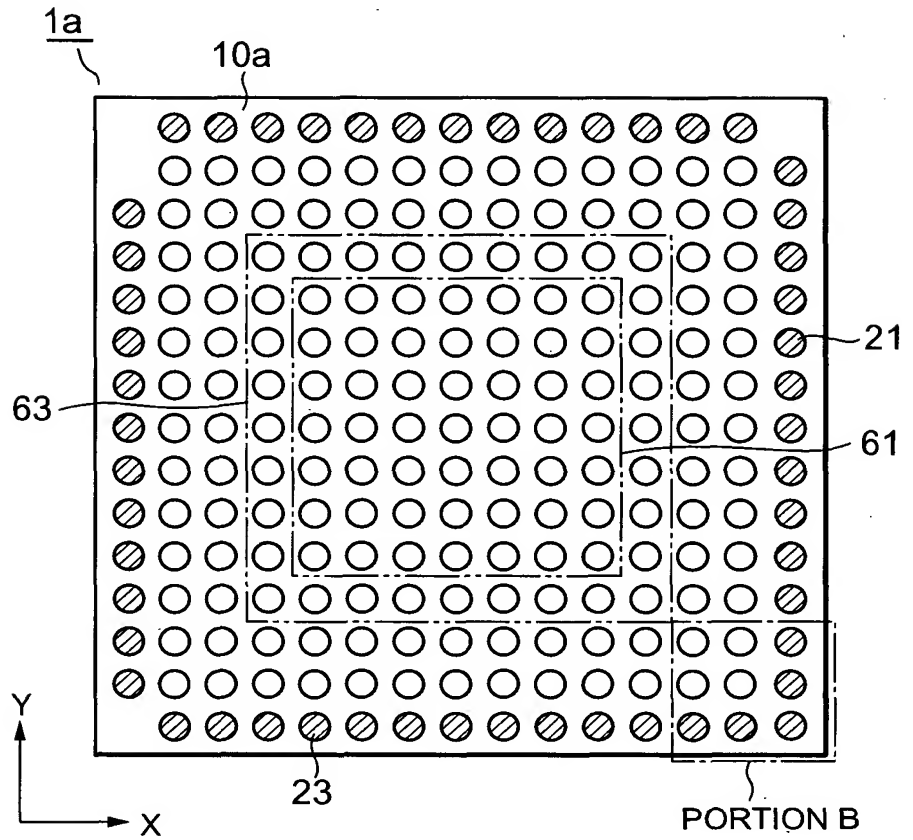


FIG.5 (b)

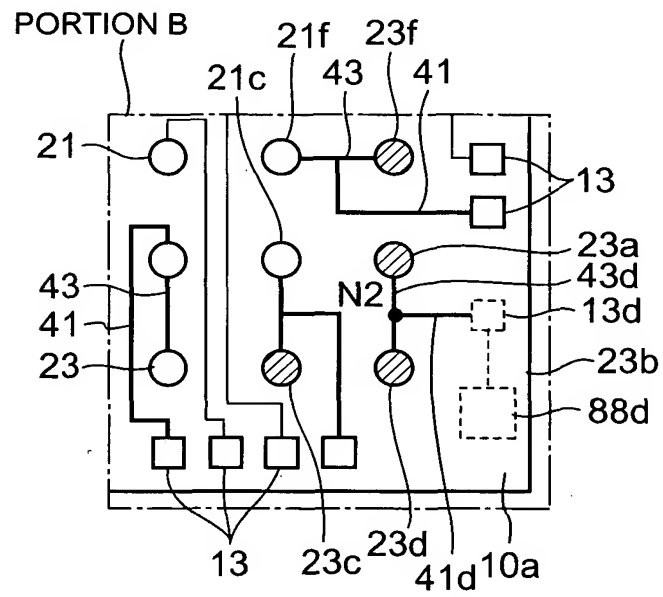


FIG.6

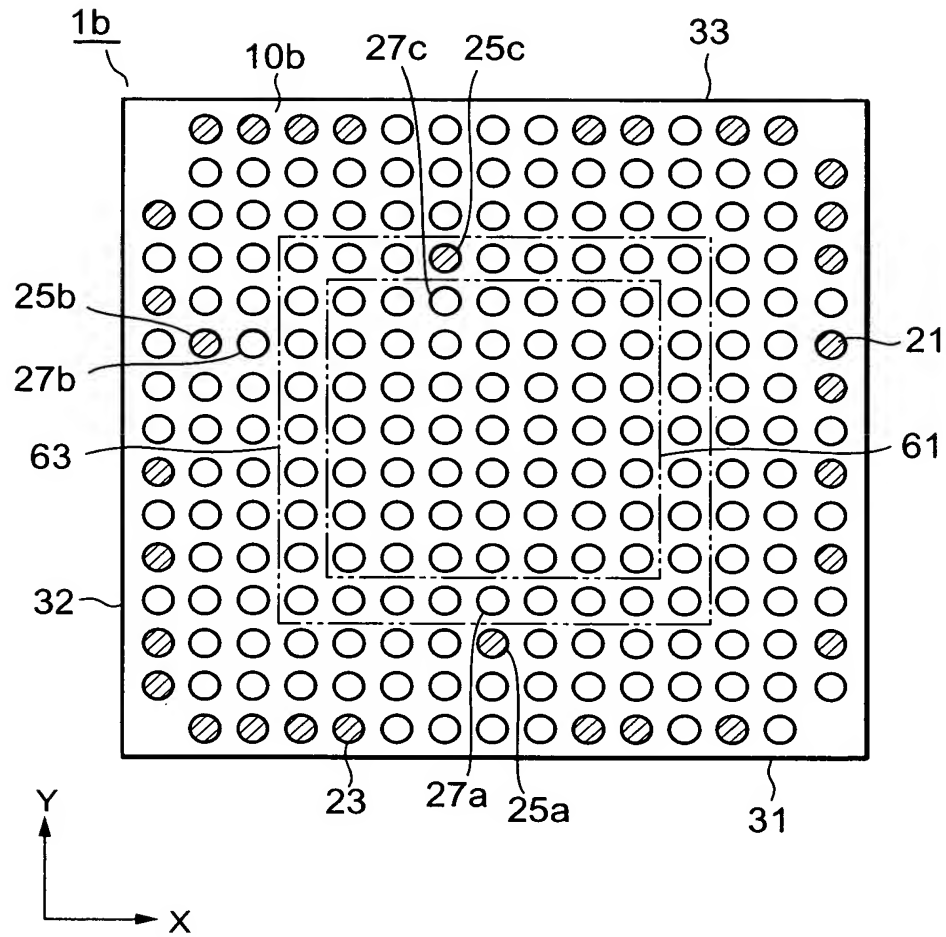


FIG.7 (a)

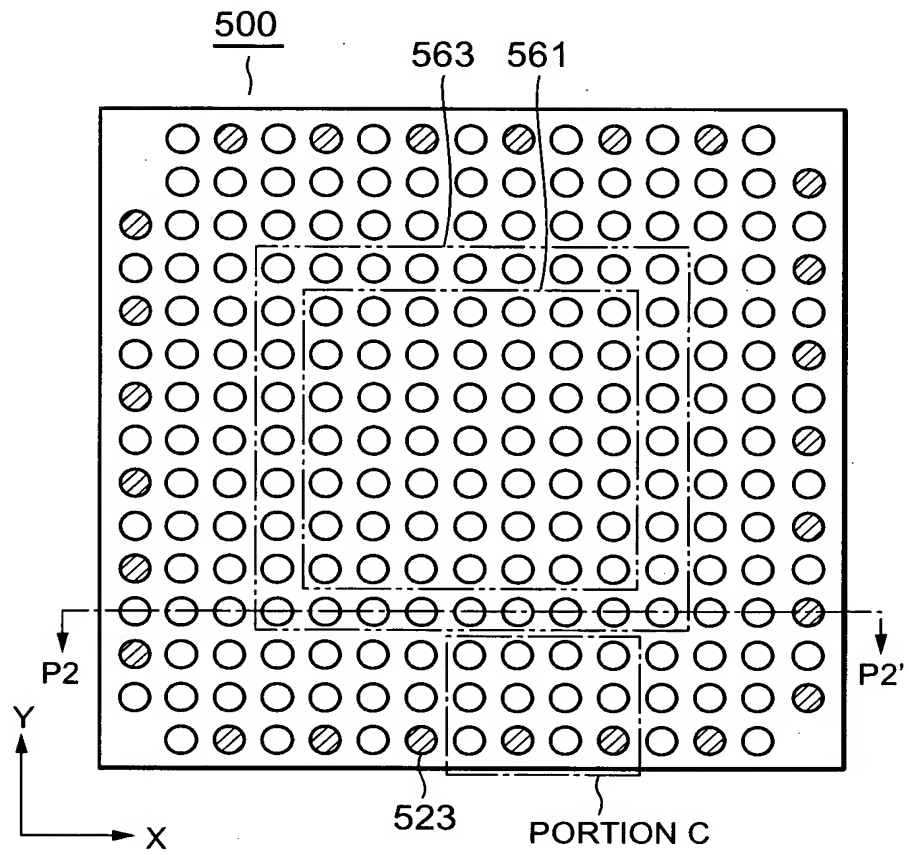
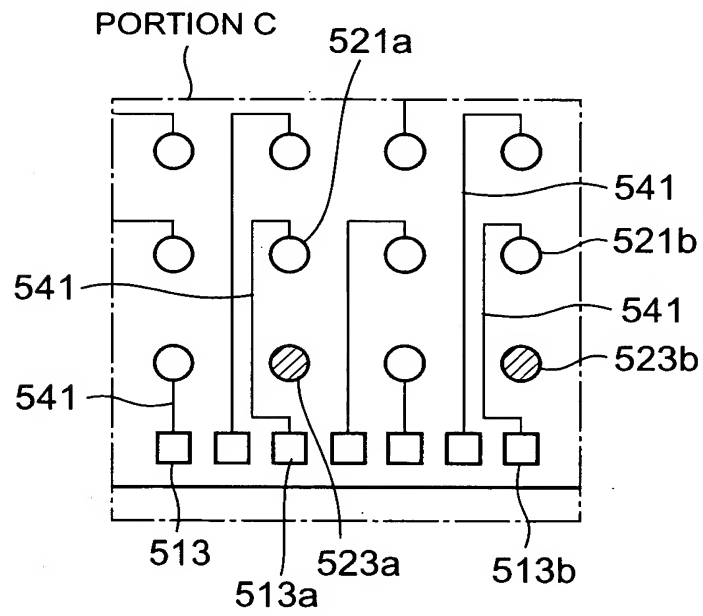


FIG.7 (b)



Inventor(s): Yoshitaka UEDA
DOCKET NO.: 016891-0858

8/12

FIG.8

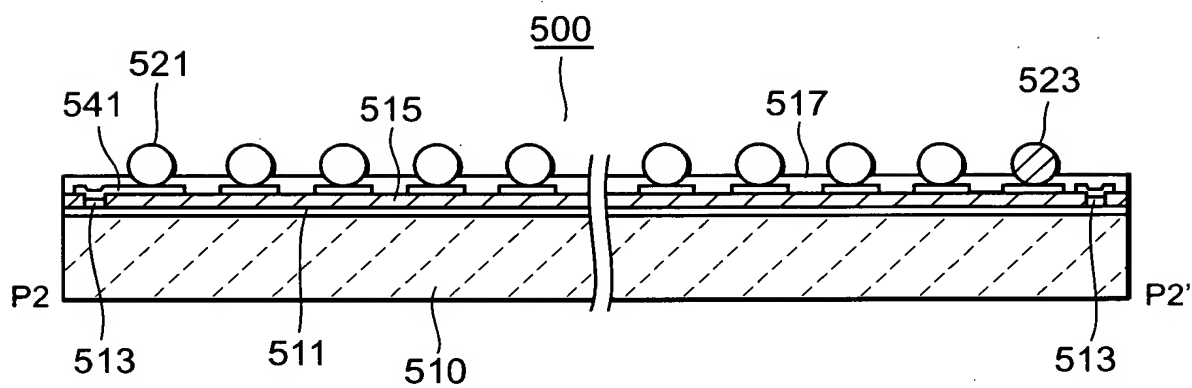


FIG.9 (a)

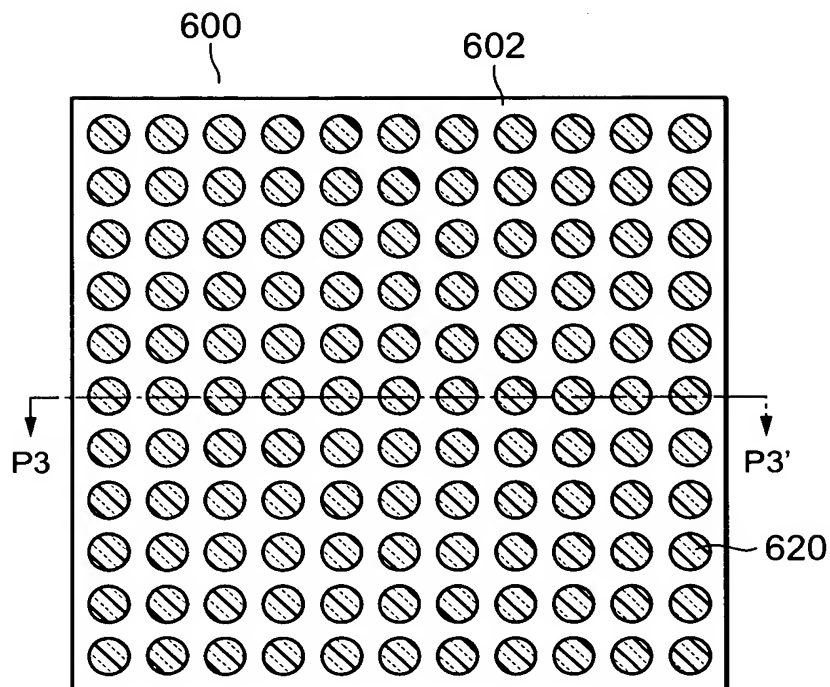


FIG.9 (b)

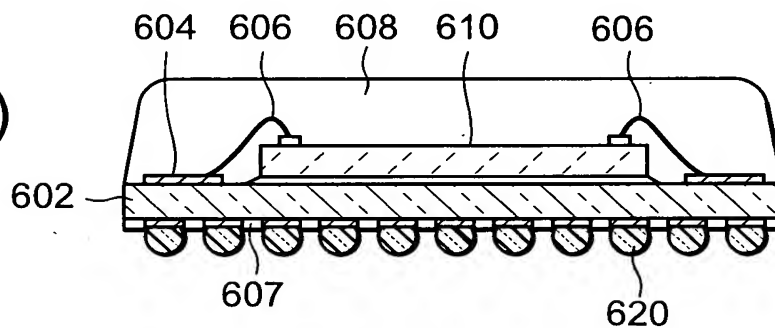
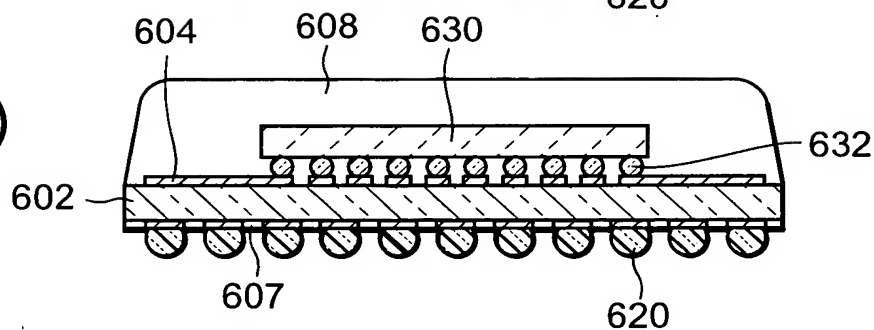


FIG.9 (c)



- | | |
|---------------------|---------------------------|
| 600 BGA TYPE LSI | 620 FIRST BUMP ELECTRODE |
| 602 PRINTED BOARD | 632 SECOND BUMP ELECTRODE |
| 604 BOARD WIRING | |
| 606 METAL WIRE | |
| 607 INSULATING FILM | |
| 608 SEALING RESIN | |
| 610, 630 CHIP | |

FIG.10 (a)

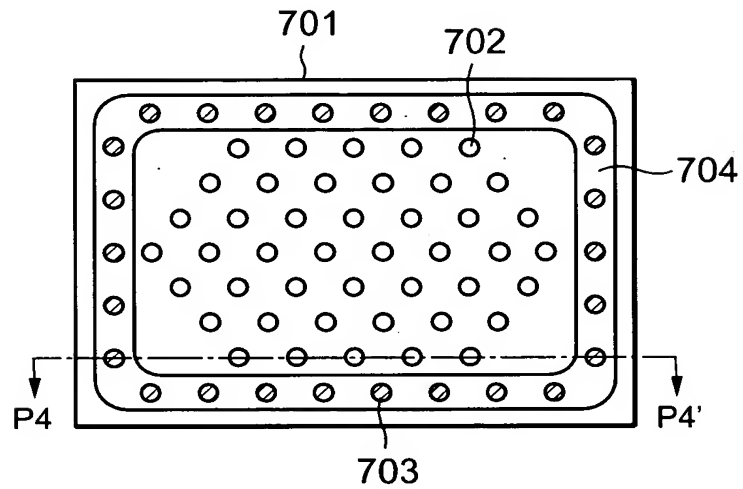


FIG.10 (b)

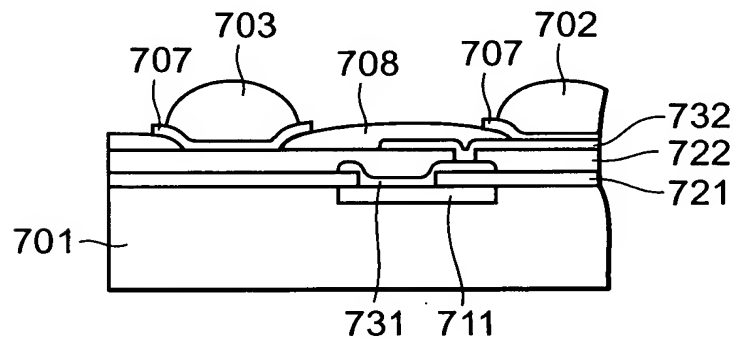


FIG.10 (c)

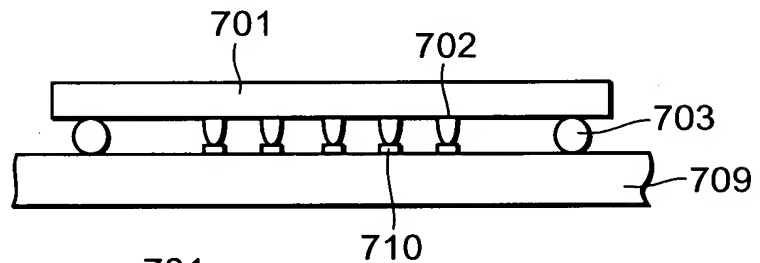


FIG.10 (d)

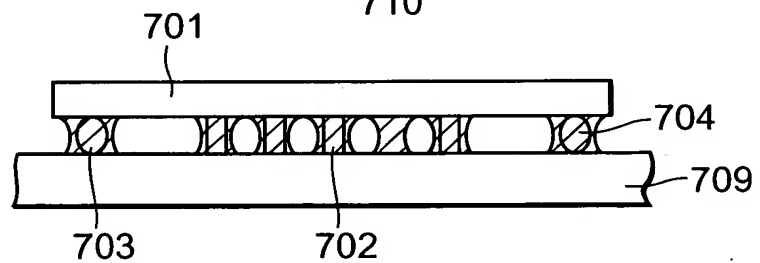


FIG.11

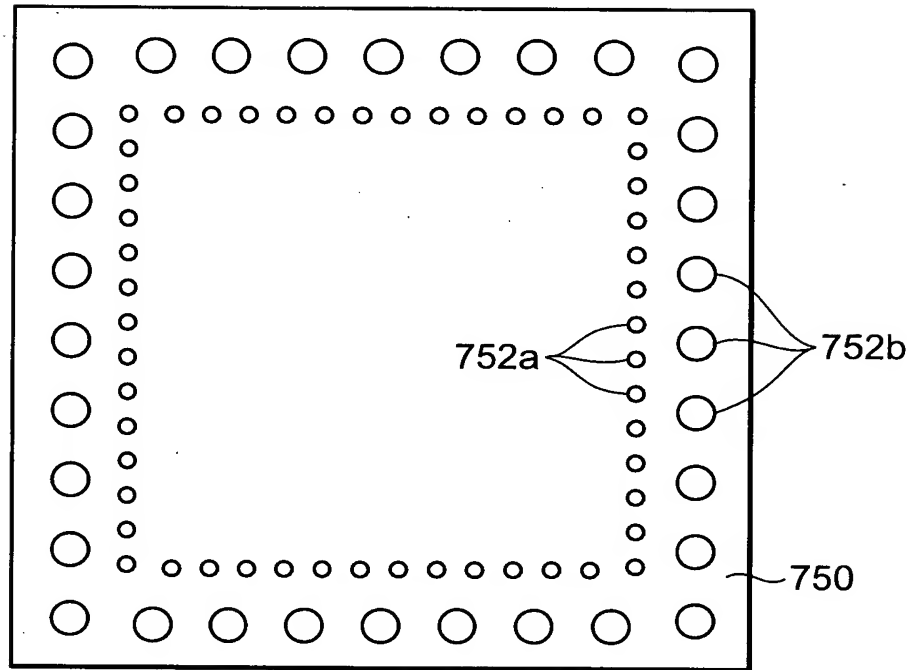


FIG.12

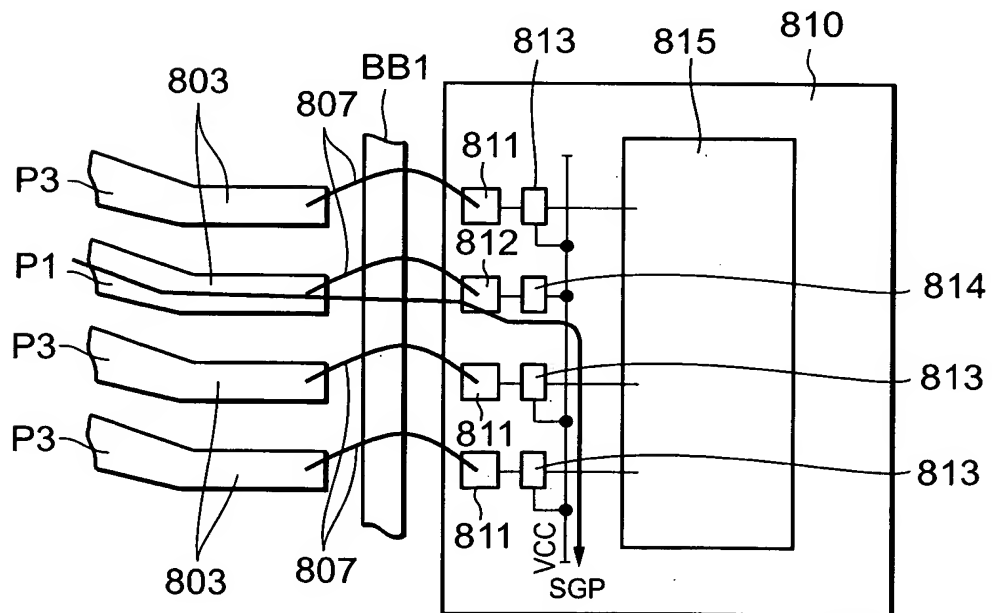


FIG.13 (a)

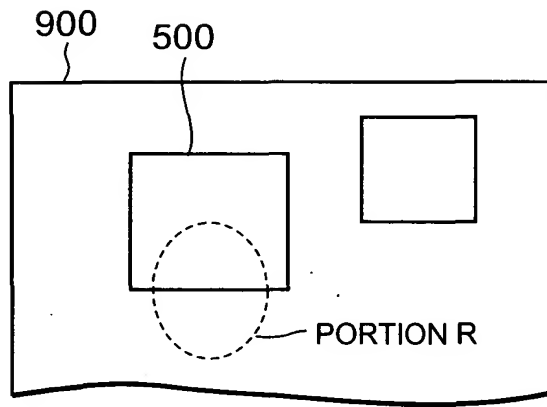


FIG.13 (b)

